=> d 11 L1 HAS NO ANSWERS L1 STR

VAR G1=10/11/12/14/15 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC 16 13 6 NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE

=> d his 13

(FILE 'REGISTRY' ENTERED AT 16:23:41 ON 22 JUL 2008) L3  $\,$  0 S L1 FUL

=> d 16 L6 HAS NO ANSWERS L6 ST



NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC 6 13 16 NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

=> d his 18

(FILE 'REGISTRY' ENTERED AT 16:23:41 ON 22 JUL 2008)
L8 163 S L6 FUL

NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC 13 16 7 NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE

=> d his 114

(FILE 'REGISTRY' ENTERED AT 16:23:41 ON 22 JUL 2008)

=> fil caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 489.92 490.34

FULL ESTIMATED COST

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FILE COVERS 1907 - 22 Jul 2008 VOL 149 ISS 4 FILE LAST UPDATED: 21 Jul 2008 (20080721/ED)

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http://www.cas.org/legal/infopolicy.html
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=> s 114
L15 2 L14
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=> d bib abs hitstr 1-2

L15 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1999:246879 CAPLUS

DN 130:296684

 ${\tt TI}$   $\;$  Preparation of indazole- and 2-oxobenzamidazole-3-carboxamides as  ${\tt 5-HT4}$  agonists and antagonists

IN Cohen, Marlene Lois; Schaus, John Mehnert; Thompson, Dennis Charles

PA Eli Lilly and Company, USA SO Eur. Pat. Appl., 26 pp.

SO Eur. Pat. Appl., 26 p CODEN: EPXXDW

DT Patent

LA English

LA	Enc	ijΙ:	ısn
FAN.	CNT	1	

FAN.CNT 1																		
	PATENT NO.			KIND DATE		APPLICATION NO.						DATE						
PI	EP 908459						EP 1998-308069						19981005					
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	PT,	ΙE,
			SI,	LT,	LV,	FΙ,	RO											
		6069									US 1997-946495							
	CA	2304	826			A1 19990415				CA 1998-2304826					19980924			
	WO	9917	772			A1 19990415		WO 1998-US19992						19980924				
		W:	AL,	AM,	AT,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CN,	CU,	CZ,	EE,	GD,	GE,
			GH,	GM,	HR,	HU,	ID,	IL,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
			LS,	LT,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	RO,	RU,	SD,	SG,
			SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZW,	AM,	AZ,
			BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM									
		RW:	GH,	GM,	KΕ,	LS,	MW,	SD,	SZ,	UG,	ZW,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,
			GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG								
	JP	2001	5185	04		T			JP 2000-514643						19980924			
		6117							US 1999-338707						19990623			
PRAI								19971007										
	WO	1998	-US1	9992		W		1998	0924									
OS	OS MARPAT 130:296684																	

OS GI

$$\begin{array}{c|c} & H & \\ &$$

AB The title compds. [I, AD = C:N,NC:O, n = 1-5; R = H, halo, alkyl, etc.; RI = H, alkyl, (un) substituted cycloalkyl; R2, R3 = H; R2R3 taken together form a bridge of 1-4 methylene units; X = OR4, NR4R5; R4 = H, alkyl, (un) substituted cycloalkyl, etc.; R5 = H; NR4R5 = pyrrolidino, piperazino, piperidino, etc.], antagonists and partial agonists for the serotonin receptor 5-HT4 which are useful for treatment of disorders caused by or affected by dysfunction of the 5-HT4 receptor such as anxiety, pain, depression, schizophrenia, memory disorders, dementia, irritable bowel syndrome, nausea, gastroscophageal reflux disease, dyspepsia, gastrointestinal motility disorders, constipation, atrial fibrillation, arrhythmias, tachycardia, urinary retention, urinary incontinence, or pain on urination, were prepared and formulated. E.g., methanesulfonylation of N-[1-(2-aminoethyl)piperidin-4-yl]-1-isopropylidazole-3-carboxamide (preparation given) afforded 60% II. Compds. I reduced the observed relaxations

of esophagus smooth muscle (of rats) at ≤ 10 µM.

IT 207296-80-8P 207296-81-9P

RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PRBP (Preparation); USES (Uses)

(preparation of indazole- and 2-oxobenzamidazole-3-carboxamides as 5-HT4 agonists and antagonists)

RN 207296-80-8 CAPLUS

CN 1H-Indazole-3-carboxamide, N-[1-[2-(benzoylamino)ethyl]-4-piperidinyl]-1-(1-methylethyl)- (CA INDEX NAME)

RN 207296-81-9 CAPLUS

1

CN 1H-Indazole-3-carboxamide, N-[1-[2-(benzoylamino)ethyl]-4-piperidinyl]-1-(1-methylethyl)-, ethanedioate (1:1) (CA INDEX NAME)

CM

CRN 207296-80-8 CMF C25 H31 N5 O2

$$\begin{array}{c|c} \text{$i$-Pr} \\ \hline \\ N \\ N \\ CH_2-CH_2-NH-C-Ph \\ \hline \\ C-NH-C-Ph \\ \end{array}$$

CM :

CRN 144-62-7 CMF C2 H2 O4

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1998:270001 CAPLUS

DN 128:316920

OREF 128:62633a

- TI Synthesis and Structure-Activity Relationships of Potent and Orally Active 5-HT4 Receptor Antagonists: Indazole and Benzimidazolone Derivatives
  AU Schaus, John M: Thompson, Dennis C:, Bloomquist, William E:; Susemichel,
- Alice D.; Calligaro, David O.; Cohen, Marlene L.

  CS Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, IN,
- 46285, USA SO Journal of Medicinal Chemistry (1998), 41(11), 1943-1955
- CODEN: JMCMAR; ISSN: 0022-2623
- PB American Chemical Society
- DT Journal
- LA English
- AB Indole-3-carboxamides, indazole-3-carboxamides, and benzimidazolone-3-carboxamides were synthesized and evaluated for antagonist affinity at the 5-HT4 receptor in the rat esophagus. The endo-3-tropanamine derivs. in the indazole and benzimidazolone series possessed greater 5-HT4 receptor affinity than the corresponding indole analogs. 5-HT4 receptor antagonist affinity was further increased by alkylation at N-1 of the aromatic heterocycle. In 1-isopropylindazole-3-carboxamides, replacement of the bicyclic tropane ring system with the monocyclic piperidine ring system or an acyclic aminoalkylene chain led to potent 5-HT4 receptor antagonists. In particular, those systems in which the basic amine was substituted with groups capable of forming H bonds showed increased 5-HT4 receptor antagonist activity. While some of these compets. displayed high affinity

for other neurotransmitter receptors (in particular, 5-HT3,  $\alpha l,$  and 5-HT2A receptors), as the conformational flexibility of the amine moiety increased, the selectivity for the 5-HT4 receptor also increased. From this series of compds., the authors identified LY353433

(1-(1-methylethyl)-N-[2-[4-[(tricyclo[3.3.1.13,7]dec-1-ylcarbonyl)amino]-1-piperidinyl]ethyl]-1H-indazole-3-carboxamide) as a potent and selective 5-HT4 receptor antagonist with clin. suitable pharmacodynamics.

II 207296-81-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis and structure-activity relationships of potent and orally active indazole and benzimidazolone 5-HT4 receptor antagonists)

RN 207296-81-9 CAPLUS CN 1H-Indazole-3-carbo:

1H-Indazole-3-carboxamide, N-[1-[2-(benzoylamino)ethyl]-4-piperidinyl]-1-(1-methylethyl)-, ethanedioate (1:1) (CA INDEX NAME)

CM

CRN 207296-80-8 CMF C25 H31 N5 O2

CM 2

CRN 144-62-7 CMF C2 H2 O4

HO-C-C-OF

RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT